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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/780,387	02/17/2004	Michael Gabler	TRW(AS)6953	1622

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EXAMINER

BERGIN, JAMES S

ART UNIT PAPER NUMBER

3641

DATE MAILED: 07/13/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/780,387

Applicant(s)

GABLER ET AL.

Examiner

James S. Bergin

Art Unit

3641

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 April 2006.
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
4a) Of the above claim(s) 6-8 and 12-21 is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1-5 and 9-11 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☒ The drawing(s) filed on 17 February 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 5/3/2004.
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. Applicant's election with traverse of species 1, sub-species 1A of Figs. 1 and 3-5 in the reply filed on 4/27/2006 is acknowledged. The traversal is on the ground(s) that *"the examiner has not shown a prima facie case for restricting the claims"* and *"it is respectfully suggested that an examination of all species does not result in a serious burden on the examiner"*. This is not found persuasive because the species and sub-species in this application, as outlined in the restriction requirement of 3/27/2006, define related but mutually exclusive species that are patentably distinct from each other (see MPEP 806.04(f) and 806.04(h)). A requirement for restriction is permissible if there is a patentable difference between the species as claimed and there would be a serious burden on the examiner if restriction is not required (See MPEP 808.01(a), 803 and 808.02). In this instance, the searches required for the related but patentably distinct species and sub-species require the excessively burdensome formulation and application of species and sub-species specific search queries (see MPEP 808.02(c)) which meets the "different field of search" and "excessively burdensome" requirements for making a restriction between the species and sub-species. As such the election of species requirement between the species is proper.

The requirement is still deemed proper and is therefore made FINAL.

2. Claims 6-8, 12, and 13-21 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected species or sub-species, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in the reply filed on 4/27/2006. Claim 12 has been withdrawn by the

examiner as being drawn to a patentably distinct sub-species of species 1, the sub-species of claim 12 (currently not illustrated in the drawings) comprising an embodiment wherein the spacing means are arranged on an end section of the second housing part rather than in the transition between the cover section and the wall section of the first housing part (see claim 10 and Figs. 4, 5).

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 1-5 and 9-11, are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 (lines 7,8) can be specific to species other than the elected sub-species of Figs. 4 and 5 because it improperly includes specific limitations, in the alternative form, that allow for the spacing means to be located on the second housing part, or both the first and second housing parts, removal of such limitations being required so as to render claim 1 consistent with the elected embodiment of Figs. 4 and 5, which requires the spacing means 44 to be located in the transition region of the first housing part, between the cover section and wall section of the first housing part). Put another way, if the spacing means are located on the second housing part, or both the first and second housing parts, how does this read on the elected embodiment of Figs. 4 and 5?

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1-5, 10 and 11 are rejected under 35 U.S.C. 102(b) as being anticipated by McFarland et al. (US 6,227,565 B1, hereinafter "McFarland").

Regarding claim 1, McFarland discloses a gas generator comprising: housing 20; propellant 140; first housing part 30; second housing part 110, the first and second housing parts movable relative to each other under pressure and forming an overflow opening 130 having a variable flow opening depending on the pressure in the housing (col. 2, line 50 – col. 3, line 7; col. 4, lines 27-35; Figs. 2, 3, 4); the first housing part 30 includes a spacing means 180, the spacing means 180 being designed so that in the case of relative movement of the housing parts 30 and 110 with respect to each other, a minimum value of the variable flow area 130 is maintained.

Regarding claim 2, McFarland's overflow opening 130 is closed before activation of the propellant 140 and is opened after activation of the propellant, with substantially the entire fluid flowing through the overflow opening (col. 4, lines 27-35, col. 6, lines 12-25; Figs. 2-4).

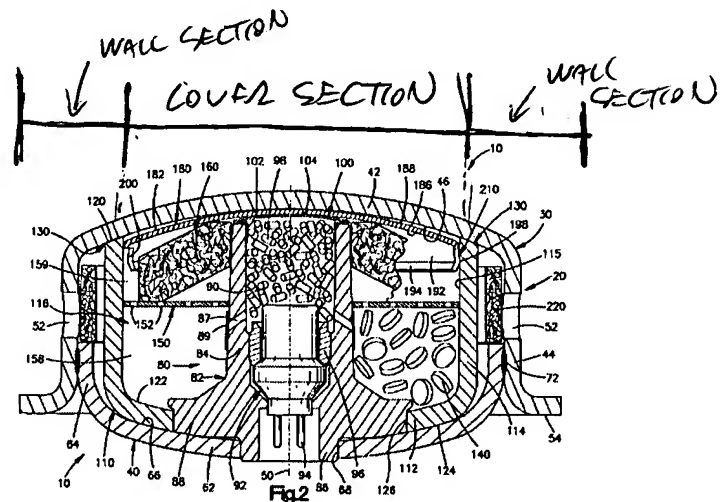
Regarding claim 3, McFarland's first and second housing parts (30, 110) are substantially radially symmetrical (Figs. 2-4).

Regarding claim 4, McFarland's first and second housing parts (30, 110) form a substantially ring-shaped overflow 130 opening after activation of the propellant 140 (Figs. 2-6; col. 6. lines 12-40).

Regarding claim 5, McFarland's overflow opening 130 has several opening sections by virtue of the slots 200 in the spacing means 180 (Figs. 5, 6).

Regarding claim 11, McFarland's second housing part 110 defines a combustion chamber (Figs. 1, 3).

Regarding claim 10, McFarland's first housing part 30 has a cover section (marked below) and a wall section (marked below) and the spacing means 180 are at least partially arranged in the transition region between the cover section and the wall section.



Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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8. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over McFarland et al. (US 6,227,565 B1, hereinafter "McFarland") or over McFarland et al. (US 6,227,565 B1) in view of official notice.

McFarland discloses a gas generator as described above. McFarland's first and first and second housing parts (30, 110) form a common first contact region when end 120 of second housing part 110 seals against the inner surface 46 of first housing part 30 before activation of the propellant. After activation of the propellant, McFarland's first housing part and second housing parts (30, 110) forms several common second contact regions with the second housing part 110 by virtue of the first housing part's spacing means 180 contacting the second housing 110 (Fig. 3; col. 6, lines 12-40).

McFarland does not specifically disclose that the first contact region is secured with an adhesive connection. However, McFarland teaches using a sealant material to secure the flange 88 of the igniter housing 82 and the end wall 62 of the closure 40 (col. 3, lines 60-65), a sealant material inherently having some adhesive properties.

In view of McFarland, it would have been obvious to one of ordinary skill in the art at the time that the invention was made to use a sealant material to secure McFarland's first contact region, to ensure complete sealing of the contacting parts.

In the alternative, the examiner takes official notice that sealants are commonly used to seal the component parts of igniters together so as to ensure that the propellant containing interior is protected from moisture, all sealants inherently possessing some adhesive properties.

In view of this official notice, it would have been obvious to one of ordinary skill in the art at the time that the invention was made to use a sealant material to secure McFarland's first contact region, so as to seal McFarland's propellant from moisture.

Conclusion

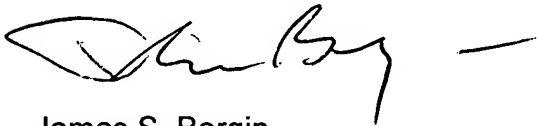
9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Smith (US 6,966,578 B2); McFarland et al. (6,543,805 B2); Trevillyan et al. (US 7,044,502 B2); and Bayer et al. (US 6,406,053 B1).

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to James S. Bergin whose telephone number is 571-272-6872. The examiner can normally be reached on Monday - Wednesday and Friday, 8.30 - 5.30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Carone can be reached on 571-272-6873. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

A handwritten signature in black ink, appearing to read "J. Bergin", followed by a horizontal line.

James S. Bergin